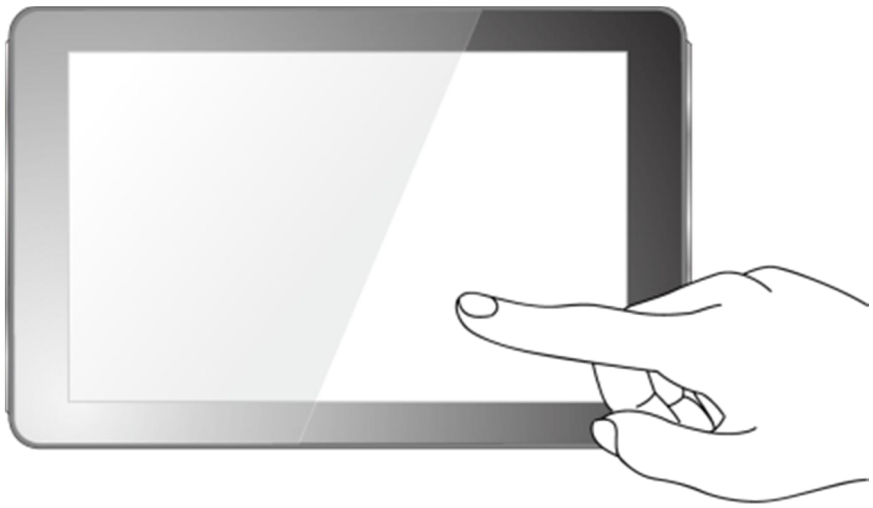
10.1” P-CAP Access Control

W10IB3S-PCH2AC & W10IB3S-PCH1AC



User Manual

Version 1.0

Copyright Notice

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Trademark Acknowledgement

Brand and product names are trademarks or registered trademarks of their respective owners.

Disclaimer

We reserves the right to make changes, without notice, to any product, including circuits and/or software described or contained in this manual in order to improve design and/or performance. We assume no responsibility or liability for the use of the described product(s), conveys no license or title under any patent, copyright, or masks work rights to these products, and makes no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified. Applications that are described in this manual are for illustration purposes only. We make no representation or guarantee that such application will be suitable for the specified use without further testing or modification.

Warranty

Our warranty guarantees that each of its products will be free from material and workmanship defects for a period of one year from the invoice date. If the customer discovers a defect, we will, at his/her option, repair or replace the defective product at no charge to the customer, provide it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in its original packaging to obtain warranty service. If the serial number and the product shipping data differ by over 30 days, the in-warranty service will be made according to the shipping date. In the serial numbers the third and fourth two digits give the year of manufacture, and the fifth digit means the month (e. g., with A for October, B for November and C for December).

For example, the serial number 1W14Axxxxxxxx means October of year 2014.

Customer Service

We provide a service guide for any problem by the following steps: First, visit the website of our distributor to find the update information about the product. Second, contact with your distributor, sales representative, or our customer service center for technical support if you need additional assistance. You may need the following information ready before you call:

- Product serial number
- Software (OS, version, application software, etc.)
- Description of complete problem
- The exact wording of any error messages

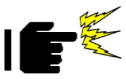
In addition, free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products.

Safety Information

Warning!

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!



Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

Safety Precautions

- Please read these safety instructions carefully.
- Please keep this user's manual for later reference.
- Please disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
- For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
- Keep this equipment away from humidity.
- Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
- The openings on the enclosure are for air convection and to protect the equipment from overheating.

  DO NOT COVER THE OPENINGS.
- Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
- Position the power cord so that people cannot step on it. Do not place anything over the power cord.
- All cautions and warnings on the equipment should be noted.
- If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
- Never pour any liquid into an opening. This could cause fire or electrical shock.
- Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
- If any of the following situations arises, get the equipment checked by service personnel:
  - The power cord or plug is damaged.
  - Liquid has penetrated into the equipment.
  - The equipment has been exposed to moisture.
  - The equipment does not work well or you cannot get it to work according to the user's manual.
  - The equipment has been dropped and damaged.
  - The equipment has obvious signs of breakage.

- Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20° C (-4°F) or above 60° C (140° F). It may damage the equipment.
- **CAUTION** – Use the recommended mounting apparatus to avoid risk of injury.
- **WARNING** – Only use the connection cords that come with the product. When in doubt, please contact the manufacturer.
- **WARNING** – Ground against electrostatic damage to the device by taking the following preventive steps:
  - Cover workstations with approved anti-static material. Use a wrist strap connected to a work surface and properly grounded tools and equipment.
  - Use anti-static mats, heel straps, or air ionizer for added protection.
  - Handle electrostatic-sensitive components, PCB's and assemblies by the case or the edge of the board.
  - Avoid contact with pins, leads, or circuitry.
  - Turn off power and input signals before inserting and removing connectors or test equipment.
  - Keep the work area free of non-conductive materials, such as ordinary plastic assembly aids and Styrofoam.
  - Use filed service tools, such as cutters, screwdrivers, and vacuum cleaners that are conductive.
  - Always lay drivers and PCB's with the component side down on anti-static foam.

Important Information

Federal Communications Commission Radio Frequency Interface Statement – For USA

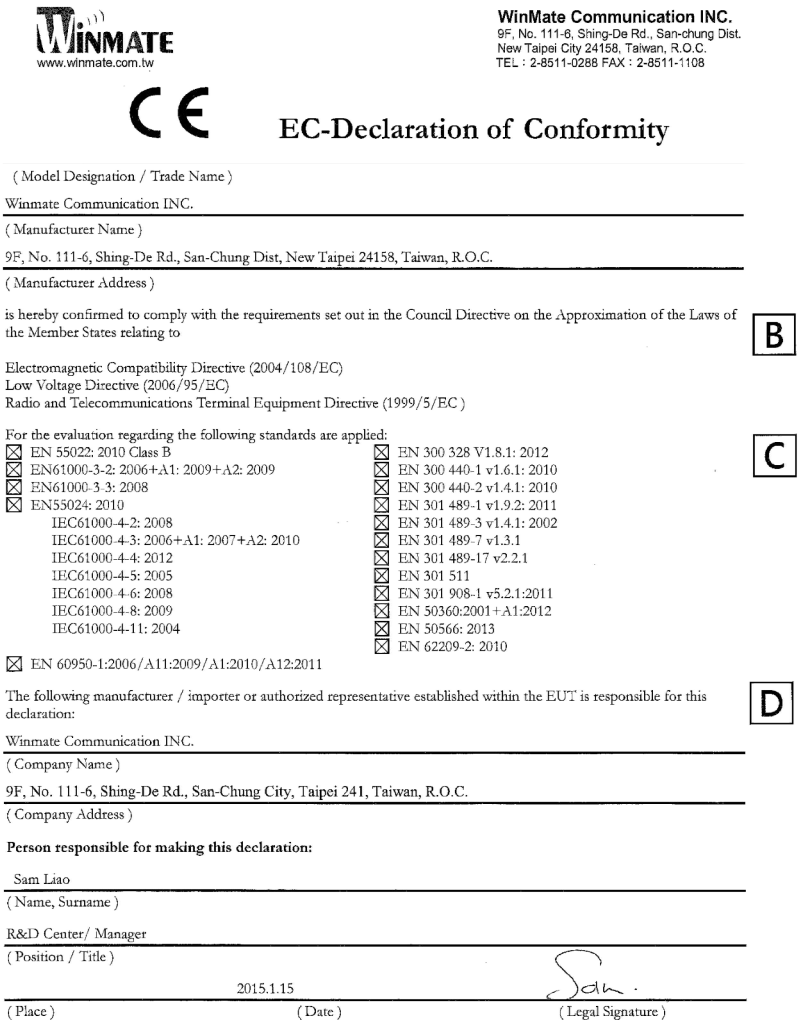
This device complies with part 15 FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class "A" digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which

case the user will be required to correct the interference at him own expense.

Declaration of Conformity (DoC)



WinMate Communication INC.
9F, No. 111-6, Shing-De Rd., San-chung Dist.
New Taipei City 24158, Taiwan, R.O.C.
TEL : 2-8511-0288 FAX : 2-8511-1108
www.winmate.com.tw

CE

EC-Declaration of Conformity

(Model Designation / Trade Name)

Winmate Communication INC.

(Manufacturer Name)

9F, No. 111-6, Shing-De Rd., San-Chung Dist, New Taipei 24158, Taiwan, R.O.C.

(Manufacturer Address)

is hereby confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to

B

Electromagnetic Compatibility Directive (2004/108/EC)
Low Voltage Directive (2006/95/EC)
Radio and Telecommunications Terminal Equipment Directive (1999/5/EC)

For the evaluation regarding the following standards are applied:

C

- ☒ EN 55022: 2010 Class B
- ☒ EN61000-3-2: 2006+A1: 2009+A2: 2009
- ☒ EN61000-3-3: 2008
- ☒ EN55024: 2010
  - IEC61000-4-2: 2008
  - IEC61000-4-3: 2006+A1: 2007+A2: 2010
  - IEC61000-4-4: 2012
  - IEC61000-4-5: 2005
  - IEC61000-4-6: 2008
  - IEC61000-4-8: 2009
  - IEC61000-4-11: 2004
- ☒ EN 300 328 V1.8.1: 2012
- ☒ EN 300 440-1 v1.6.1: 2010
- ☒ EN 300 440-2 v1.4.1: 2010
- ☒ EN 301 489-1 v1.9.2: 2011
- ☒ EN 301 489-3 v1.4.1: 2002
- ☒ EN 301 489-7 v1.3.1
- ☒ EN 301 489-17 v2.2.1
- ☒ EN 301 511
- ☒ EN 301 908-1 v5.2.1:2011
- ☒ EN 50360:2001+A1:2012
- ☒ EN 50566: 2013
- ☒ EN 62209-2: 2010
- ☒ EN 60950-1:2006/A11:2009/A1:2010/A12:2011

The following manufacturer / importer or authorized representative established within the EUT is responsible for this declaration:

D

Winmate Communication INC.

(Company Name)

9F, No. 111-6, Shing-De Rd., San-Chung City, Taipei 241, Taiwan, R.O.C.

(Company Address)

Person responsible for making this declaration:

Sam Liao

(Name, Surname)

R&D Center/ Manager

(Position / Title)

2015.1.15

(Place) (Date) (Legal Signature)

[English]

The object of the declaration described above [A] is in conformity with the requirement of the following EU legislations [B] and harmonized standards [C].

Product also complies with the Council directions [D].

[German]

Das oben beschriebene Objekt [A] entspricht den Anforderungen der nachfolgend aufgeführten EU-Vorgben [B] und den harmonisierten Normen [C].

Das Produkt entspricht außerdem den EU-Direktiven [D].

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Introduction

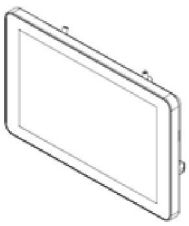
Interactive and smart display system of an intelligence building is in a fast growing phase. Winmate Multi Touch Flat Panel PC and Display are suitable for home automation and room management systems. By connecting to centralized database, it can provide real time update for booking status and available schedule, or perform as a synchronous display in meetings.

Features

- 10.1” 1280 x 800 Resolution with P-Cap Multi-touch Screen (W10IB3S-PCH2AC)
- 10.1” 1204 x 600 Resolution with P-Cap Multi-touch Screen (W10IB3S-PCH1AC)
- Low-Power System with Intel® Celeron® N2930 Processor
- Fanless Cooling System and Ultra-low Power Consumption
- Dual Gigabit Ethernet
- Front IP65 Water and Dust Proof
- LED Light Bar Indicator (Optional)
- Built-in HF RFID (Optional)

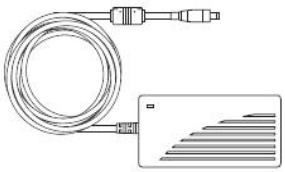
PackageContents

Before using this Panel PC, please make sure that all the items listed below are present in your package

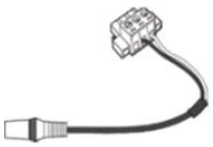


10.1” Panel PC

Power Cord



AC to DC Power Adapter



Terminal Block 3 pin

External USB cable

Driver CD & Manual

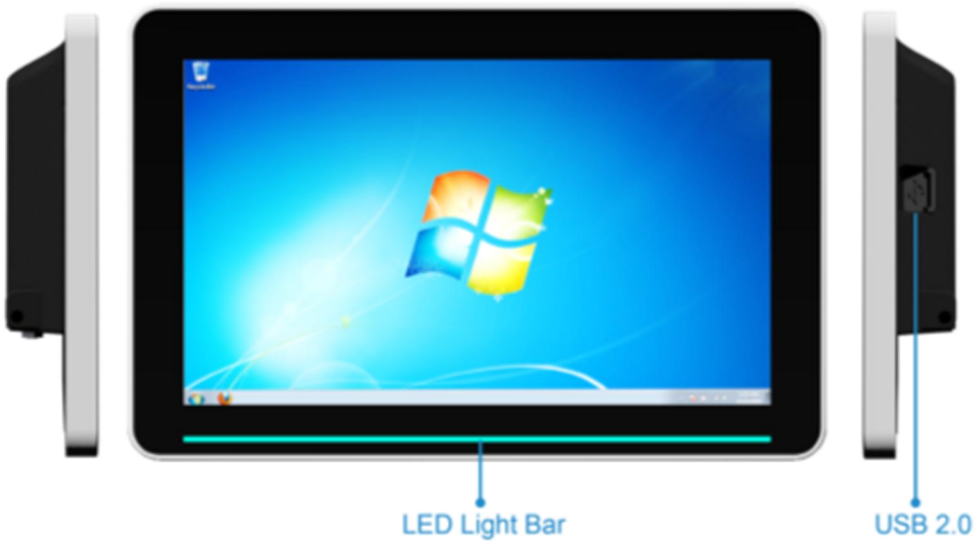
VESA Mounting Screw

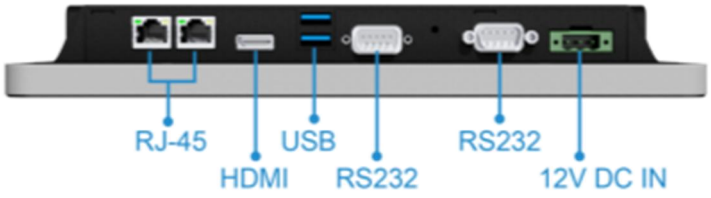
Drawing Input / Output Instruction

The input / output instruction are as follows:

W10IB3S-PCH2AC

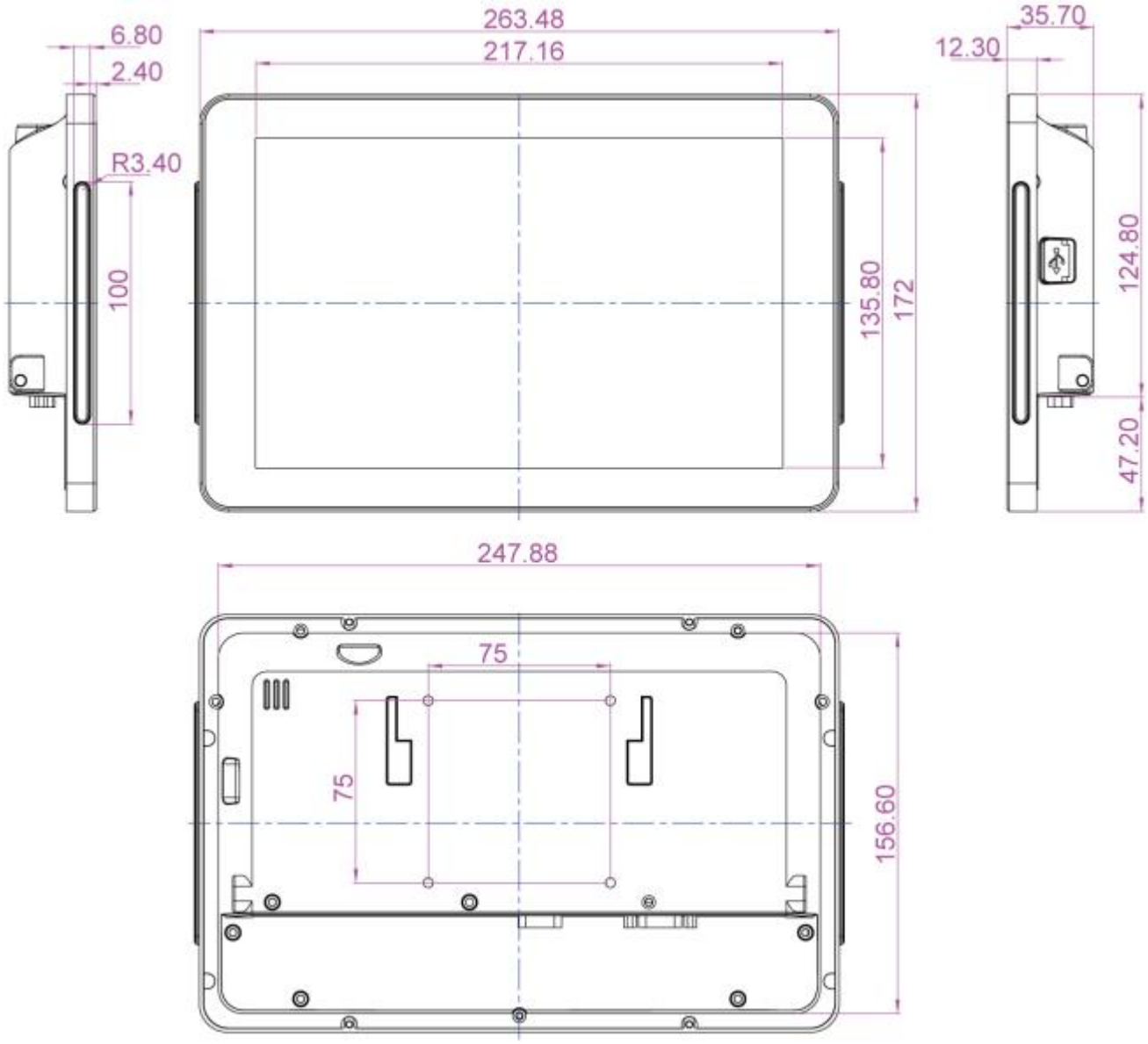
W10IB3S-PCH1AC



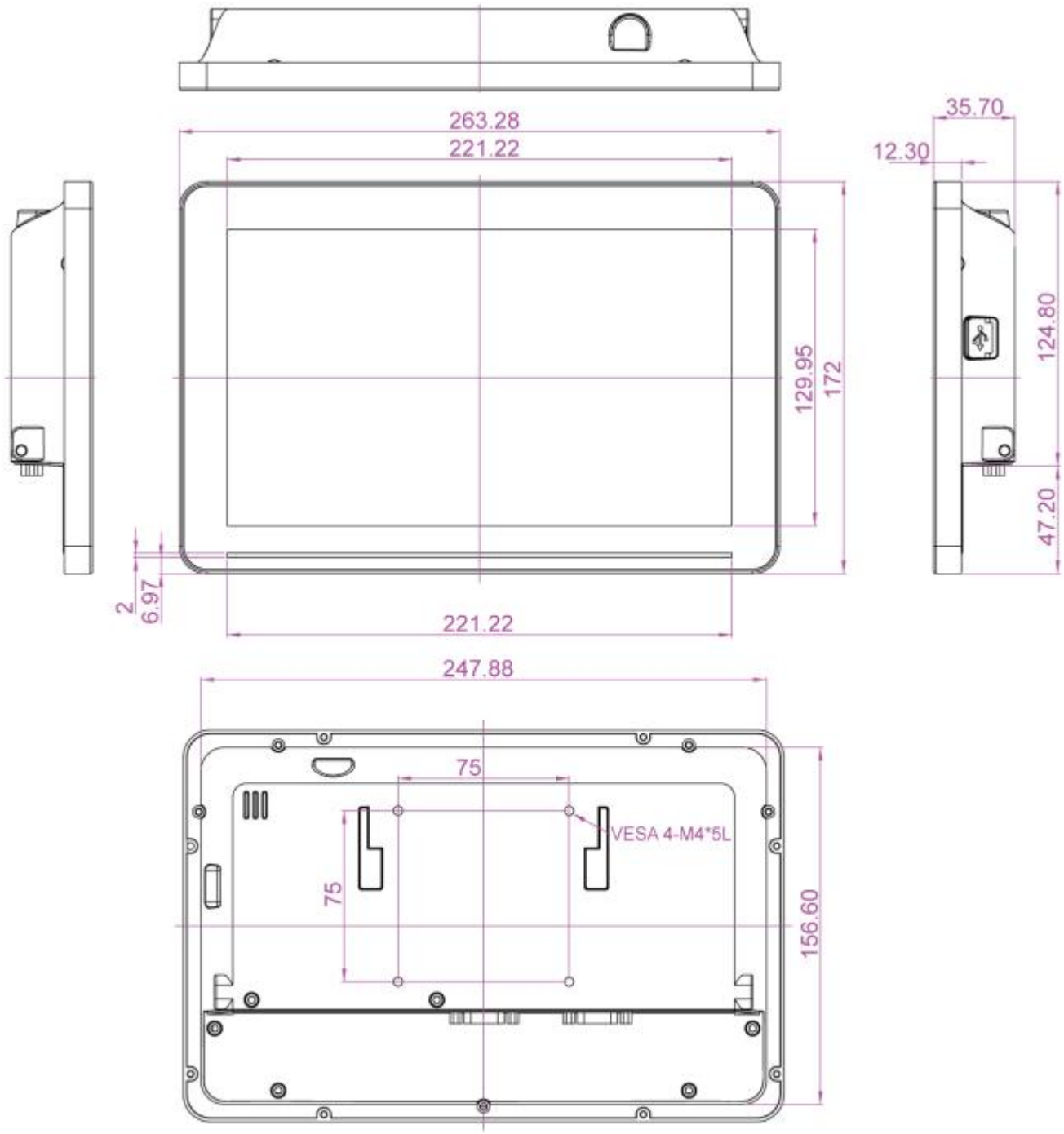


Mechanical Dimensions

W10IB3S-PCH2AC



W10IB3S-PCH1



GETTING STARTED

Jumpers

Jumper list

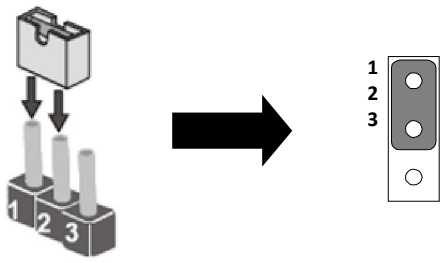
The following table lists the function of each of the board's jumpers.

Label	Function	Note
JP1	Inverter Voltage Select	3x1 header , pitch 2.0mm
JP2	Inverter Enable Select	3x1 header , pitch 2.0mm
JP4	DC Mode Control	3x1 header , pitch 2.0mm
JP5	From SoC Brightness PWM Voltage Select	3x1 header , pitch 2.0mm
JP6	Brightness Control Select	3x1 header , pitch 2.0mm
JP7	Brightness Control to VRD	3x1 header , pitch 2.0mm
JP8	COM Port Select	2x3 header , pitch 2.0mm
JP9	COM Port Select	3x4 header , pitch 2.0mm
JP10	VRD Brightness Function	3x1 header , pitch 2.0mm

Jumper settings

A metal-bridge jumper used to close an electric circuit, and it usually consists of two metal pins and one small clip protected by a plastic cover that slides over the pins to connect them. Users can connect the pins with the clip to close a jumper, and remove the clip to open a jumper. Generally, a jumper will have three pins which labeled 1, 2, and 3. In this case, you would connect either pins 1 and 2, or 2 and 3.

The jumper setting diagram is as below. If a jumper shorts pin 1 and pin 2, the setting diagram is shown as the right one.



A pair of needle-nose pliers may be helpful when working with jumpers. If you have any doubts about the best hardware configuration for your application, contact your local distributor or sales representative before you make any changes.

JP1 : Inverter Voltage Select

Location	Header Type	Description	Function
JP1	Header 3*1	Inverter Voltage Select	1-2: 5.0V
			2-3: 12 V

※ Default : 1-2

JP2 : Inverter Enable Select

Location	Header Type	Description	Function
JP2	Header 3*1	Inverter Enable Select	1-2: Control to BLON
			2-3: Normal (Always)

※ Default : 1-2

JP4 : DC Mode Control

Location	Header Type	Description	Function
JP4	Header 3*1	DC Mode Control (For VR)	1-2: Control to VRD
			2-3: Normal(For DC)

※ Default : 2-3

JP5 : From SoC Brightness PWM Voltage Select

Location	Header Type	Description	Function
JP5	Header 3*1	From SoC Brightness PWM Voltage Select	1-2: 3.3V
			2-3: 5.0V

※ Default : 1-2

JP6 : Brightness Control Select

Location	Header Type	Description	Function
JP6	Header 3*1	Brightness Control Select (DC Mode or PWM Mode)	1-2: DC Mode
			2-3: PWM Mode

※ Default : 1-2

JP7 : Brightness Control to VRD

Location	Header Type	Description	Function
JP7	Header 3*1	Brightness Control to VRD (VRD PWM)	1-2: Normal Mode
			2-3: VRD Control

※ Default : 1-2

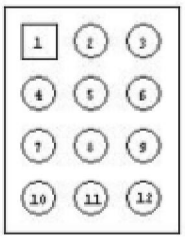
JP8/JP9 : COM Port Select

Location	Header Type	Description	Function
JP8	Header 2*3	RS232	1-2
		RS422	3-4
		RS485	5-6

※ Default : 1-2

Location	Header Type	Description	Function
JP9	Header 3*4	RS232	1-2 4-5 7-8 10-11
		RS422	2-3 5-6 8-9 11-12
		RS485	

※ Default : 1-2 4-5 7-8 10-11



JP10 : VRD Brightness Function

Location	Header Type	Description	Function
JP10	Header 3*1	VRD Brightness Function	1-2: Analog (VR)
			2-3: Digital (OSD)

※ Default : 1-2

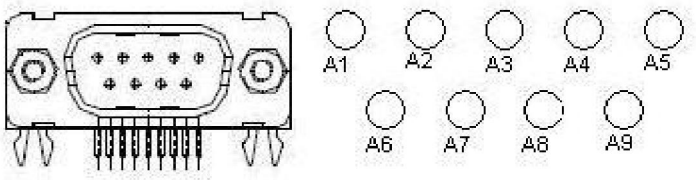
Connectors and Pin assignments

The table below lists the function of each of the board's connectors.

Label	Function
DC Jack	12V Power Input
COM1	RS232/422/485
USB 1/2	USB 3.0/USB2.0 Ports
HDMI 1	HDMI Connector
LAN1 / 2	Intel® LAN Ports
1394b	1394b (optional)
SPK	2W External Speaker
Audio	Line_in / Line_out / Mic_in
VGA	VGA Internal Wafer
LVDS	LVDS Port

SATA II	SATA 2.0 Port
SATA Power	SATA Power
CPU Fan	CPU Fan
Front Panel	System Function (Power / Reset)
3.3V	3.3V Output
5V	5V Output
12V	12V Output
GPIO	General Purpose I/O
12V DC Input	12V DC Power Input Wafer
USB 3/4	USB 2.0 Wafer
USB 5/6	USB 2.0 Wafer
COM2	RS232
COM3	RS232
COM4	RS232
Mini PCIe	Full / Half-Size Mini PCIe
Mini Card Slot	For mSATA SSD Card
DDR3L SO-DIMM	DDR3L SO-DIMM Socket

COM1: RS232/422/485

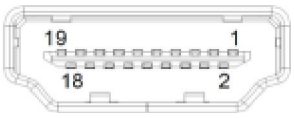


Pin No.	SYMBOL	Pin No.	SYMBOL
1	DCD	2	RxD
3	TxD	4	DTR
5	GND	6	DSR
7	RTX	8	CTS
9	RI		

USB 1/2: USB 3.0 (Lower)/USB2.0 (Upper)Ports

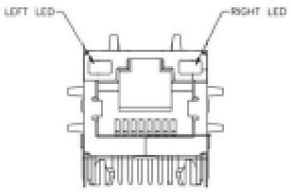
Pin Number	Signal Name	Pin Number	Signal Name
1	+5VUSB3.0	10	+5VUSB2.0
2	U2DN0	11	U2DN1
3	U2DP0	12	U2DP1
4	USB_GND	13	USB_GND
5	U3RXDN1		
6	U3RXDP1		
7	USB_GND		
8	U3TXDN1		
9	U3TXDP1		

HDMI: HDMI Connector



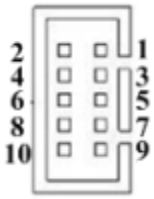
Pin No.	SYMBOL	Pin No.	SYMBOL
1	HDMIB_TMDS0+	2	GND
3	HDMIB_TMDS0-	4	HDMIB_TMDS1+
5	GND	6	HDMIB_TMDS1-
7	HDMIB_TMDS2+	8	GND
9	HDMIB_TMDS2-	10	HDMIB_CLK+
11	GND	12	HDMIB_CLK-
13	GND	14	NC
15	HDMI_DDC_CLK	16	HDMI_DDC_DATA
17	GND	18	+V5S
19	HDMI_HPD1		

LAN1 (LAN2): Intel® LAN Ports (RJ-45)



Pin No.	SYMBOL	Pin No.	SYMBOL
1	MDI0_IN+	2	MDI0_IN-
3	MDI1_IN+	4	MDI1_IN-
5	VLAN_12	6	LAN1_DGND
7	MDI2_IN+	8	MDI2_IN-
9	MDI3_IN+	10	MDI3_IN-
11	LAN_VDD	12	LAN_TRAFFICLED#
13	LAN_SPD100LED#	14	LAN_SPD1000LED#
15	UGND	16	UGND

1394b (optional)



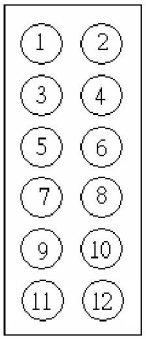
Pin No.	SYMBOL	Pin No.	SYMBOL
1	1394b_TPB0+	2	1394b_TPA0+
3	1394b_TPB0-	4	1394b_TPA0-
5	GND	6	GND
7	+V12S	8	N/C
9	N/C	10	N/C

SPK: 2W External Speaker

Pin No.	SYMBOL	Pin No.	SYMBOL
1	LOUT+	2	LOUT-

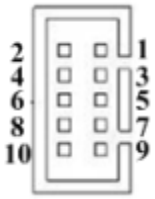
Pin No.	SYMBOL	Pin No.	SYMBOL
1	ROUT+	2	ROUT-

Audio: Line_in / Line_out / Mic_in



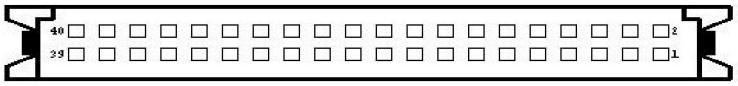
Pin No.	SYMBOL	Pin No.	SYMBOL
1	AZ_FOUT_R	2	AZ_FOUT_L
3	+5VA	4	AUGND
5	LINE1_R	6	LINE1_L
7	MIC1_R	8	MIC1_L
9	AUGND	10	Font_SENSE
11	Mic_SENSE	12	Line_SENSE

VGA: VGA Internal Wafer



Pin No.	SYMBOL	Pin No.	SYMBOL
1	DAC_SDAT0	2	VGA_5V
3	DAC_SCL0	4	R_FILTER
5	3VHSYNC0	6	G_FILTER
7	3VVSYNC0	8	B_FILTER
9	GND	10	GND

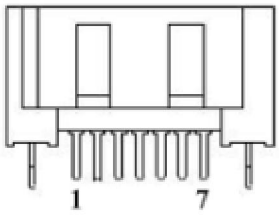
LVDS: LVDS Port



Pin No.	SYMBOL	Pin No.	SYMBOL
1	LCDVDD	2	TXOUT_L0-
3	LCDVDD	4	TXOUT_L0+
5	LCDVDD	6	TXOUT_L1-
7	GND	8	TXOUT_L1+
9	GND	10	TXOUT_L2-
11	GND	12	TXOUT_L2+
13	GND	14	TXCLK_L-
15	GND	16	TXCLK_L+
17	GND	18	TXOUT_L3-
19	GND	20	TXOUT_L3+
21	GND	22	TXOUT_U0-
23	GND	24	TXOUT_U0+
25	GND	26	TXOUT_U1-
27	GND	28	TXOUT_U1+
29	GND	30	TXOUT_U2-
31	GND	32	TXOUT_U2+
33	GND	34	TXCLK_U-
35	GND	36	TXCLK_U+
37	GND	38	TXOUT_U3-
39	GND	40	TXOUT_U3+

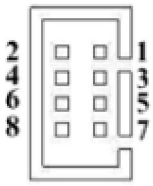
Location	Header Type	Description	Function	
CON5	Header 2*3	LVDS VOLTAGE	3.3V	1-2
			5V	3-4
			12V	5-6

SATA II: SATA 2.0 Port



Pin No.	SYMBOL	Pin No.	SYMBOL
1	GND	2	SATA_TXP
3	SATA_TXN	4	GND
5	SATA_RXN	6	SATA_RXP
7	GND		

SATA Power



Pin No.	SYMBOL	Pin No.	SYMBOL
1	+12V	2	+12V
3	GND	4	GND
5	GND	6	GND
7	VCC	8	VCC

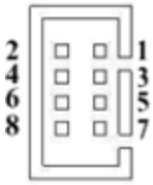
CPU Fan

Pin No.	**SYMBOL**	**Pin No.**	**SYMBOL**
1	GND	2	+12V
3	SENSE		

GPIO: General Purpose I/O

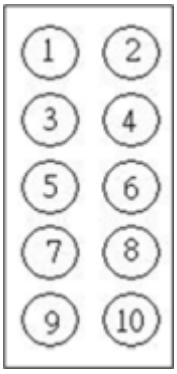
Pin No.	SYMBOL	Pin No.	SYMBOL
1	GND	2	+V5A
3	DOUT3	4	DOUT1
5	DOUT2	6	DOUT0
7	DINT3	8	DINT2
9	DINT1	10	DINT0
11	GPIO53_IN0	12	GPIO56_OUT0
13	GPIO54_IN1	14	GPIO57_OUT1

USB 3/4 (USB 5/6): USB 2.0 Wafer



Pin No.	SYMBOL	Pin No.	SYMBOL
1	VCC	2	VCC
3	DATA0-	4	DATA1-
5	DATA0+	6	DATA1+
7	GND	8	GND

COM2 (COM3 / COM4): RS232



Pin	Signal Name	Pin	Signal Name
1	FK_NDCD[2:4]	2	FK_NDSR[2:4]
3	FK_NSIN[2:4]	4	FK_NRTS[2:4]
5	FK_NSOUT[2:4]	6	FK_NCTS[2:4]
7	FK_NDTR[2:4]	8	FK_NRI[2:4]
9	GND	10	GND

Using the AC power adapter.

Perform the following to connect the Panel PC to AC to DCAdapter:

1. Plug the power cord into the power adapter.
2. Connect the terminal block cable with power adapter
3. Plug the Terminal block cable to the W10IB3S
4. Plug the power cord into a working AC wall outlet and the device will boot automatically

Note

Power cords vary in appearance by region and country.

AC adapter components

AC to DC 12V power Adapter cable

Power Cord

Terminal Block to DC Jack

Tips for using the AC power adapter

- Plug the power cord into an AC outlet that is easily accessible at all times.
- Always plug the AC adapter into a grounded outlet.

Caution

If you do not use a grounded outlet, you may notice an electrical tingling sensation when the palms of your hands touch the W10IB3S during use.

About the Adapter

- Use only the supplied AC adapter (Rating: Input DC 15V, 2.4A). Use of another type of AC adapter will result in malfunction and/or danger.
- Do not use the adapter in a high moisture environment. Never touch the adapter when your hands or feet are wet.
- Allow adequate ventilation around the adapter when using it to operate the device . Do not cover the AC adapter with paper or other objects that will reduce cooling. Do not use the AC adapter while it is inside a carrying case.
- Connect the adapter to a proper power source. The voltage requirements are found on the

product case and/or packaging.

- Do not use the adapter if the cord becomes damaged.
- Do not attempt to service the unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

How to turn on the device

Connecting to Power Supply

The Panel PC operates on external DC power. It is strongly recommended to use the AC to DC adapter included in the package.

Caution

Use only the AC adapter included with your Panel PC package. Using other AC adapters may damage the Device.

Perform the following to connect the Panel PC to AC to DCAdapter:

1. Plug the power cord into the power adapter.
2. Connect the terminal block cable with power adapter
3. Plug the Terminal block cable to the W10IB3S
4. Plug the power cord into a working AC wall outlet and the device will boot automatically

Turning off the device

You could turn off your device through the charm bar. When the charm bar opens, click settings, and then select power from the icon menu at the bottom. A menu will pop up, and you can select “shut down” to turn off your device.

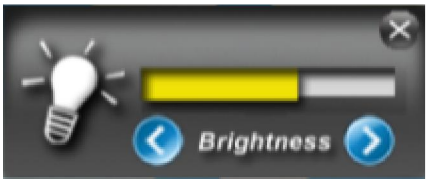
Software Utilities

1. Double click the Hot Tab icon on the windows desktop.

2. The Hot Tab main menu will be shown on the desktop as following image.

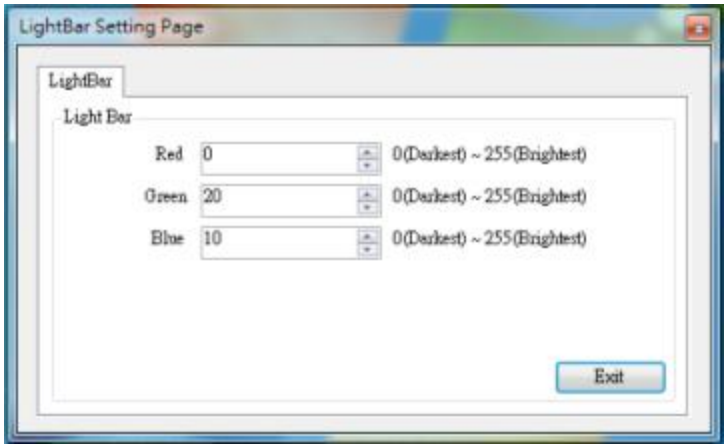
"Utilities"-Tapping this button will automatically change its orientation from landscape to portrait mode or different degree such as 0◦, 90◦, 180◦, 270◦. Enable or disable auto rotation button is also available in this part.

"Brightness" Tap this to show current brightness level. Drag by touch left part to reduce the brightness and drag by touch right part to enhance brightness. Tap Close to save the changes and exit the interface.



"Volume" Tap this to show current volume level. Drag by touch left part to reduce the Reduce the amount of sound and by touch right part to enhance sound

“LED Light Bar” Tip this button to access the LED light bar control panel, adjust the value of Red / Green / Blue to control the of LED light Bar.



“Performance” User can adjust the level of their W10IB3S whether it is Extreme performance / Office Document / High performance/ Power Saving

“Touch lock” Using touch lock button to lock / unlock the touch function.

LED Light Bar SDK Porting Guide

For the SDK porting guide of LED Light Bar, please click the download path as below to visit our website to download it.

http://www.winmate.com.tw/DownCenter/DownLoadCenter.asp?DownType=300301

Projected CapacitiveTouch

The projected capacitive touch is mainly made up with three components: sensor layer, cover glass, and controller. Within the sensor layer is a matrix of rows and columns of conductive material. When voltage applies through this matrix, a measurable electrostatic field is then created. The cover glass is optically bonded on top of the sensor layer, burying the electrodes within the stack of the lamination. It serves as a dielectric between your touch and the electrodes of the sensor layer. The controller continually scans and monitors the capacitance of the electrodes.

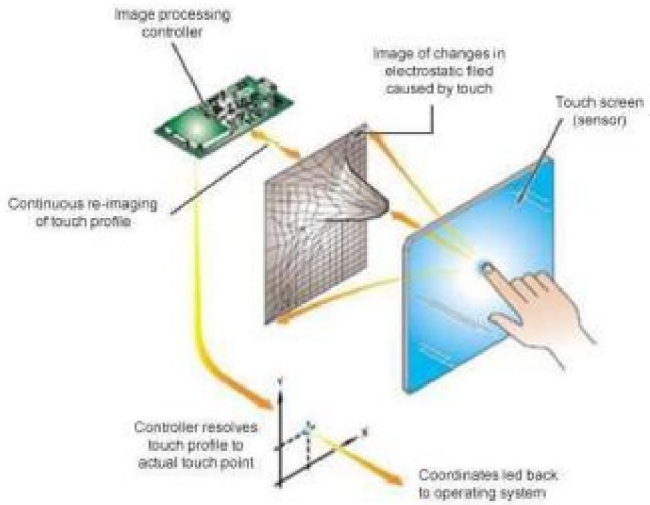


Image processing controller
Image of changes in electrostatic filed caused by touch
Touch screen (sensor)
Continuous re-imaging of touch profile
Controller resolves touch profile to actual touch point
Coordinates fed back to operating system

When a conductive object, such as a finger or capacitive stylus, touches the P-Cap touch screen, it distorts the local electrostatic field at that point.

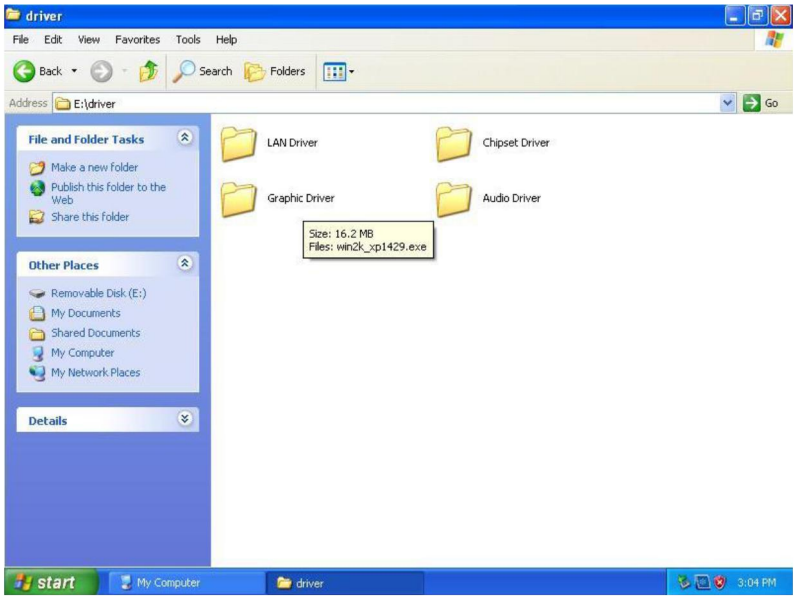
Projective capacitive touch screen provides the following benefits:

- Clear glass substrate (high optical performance / transmittance)
- Multi-touch / Gesturerecognition
- Durable / Anti-scratch coverglass
- True flat front surface / Easy Clean

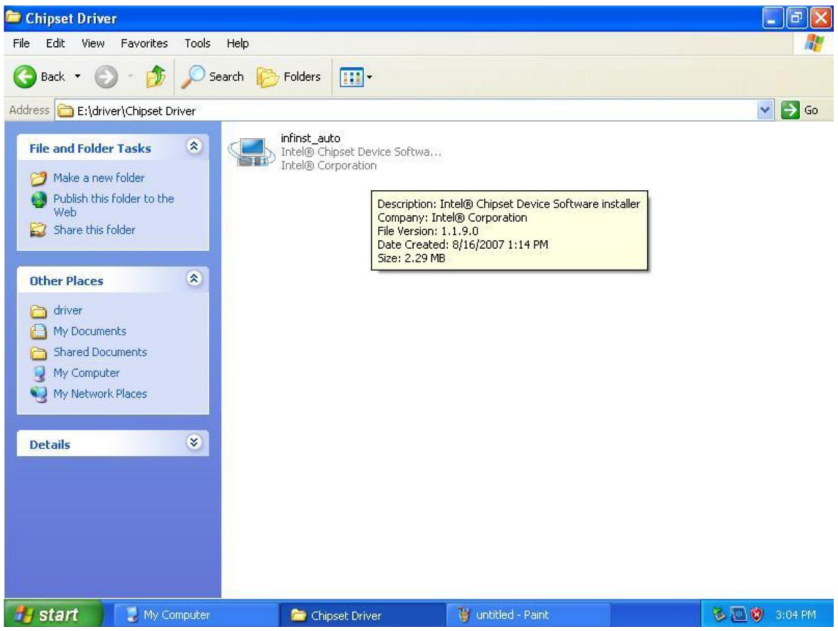
Driver Installation

Installation of Chipset Driver

Step.1. Insert the CD that comes with the motherboard. Open the file document “Chipset Driver”.



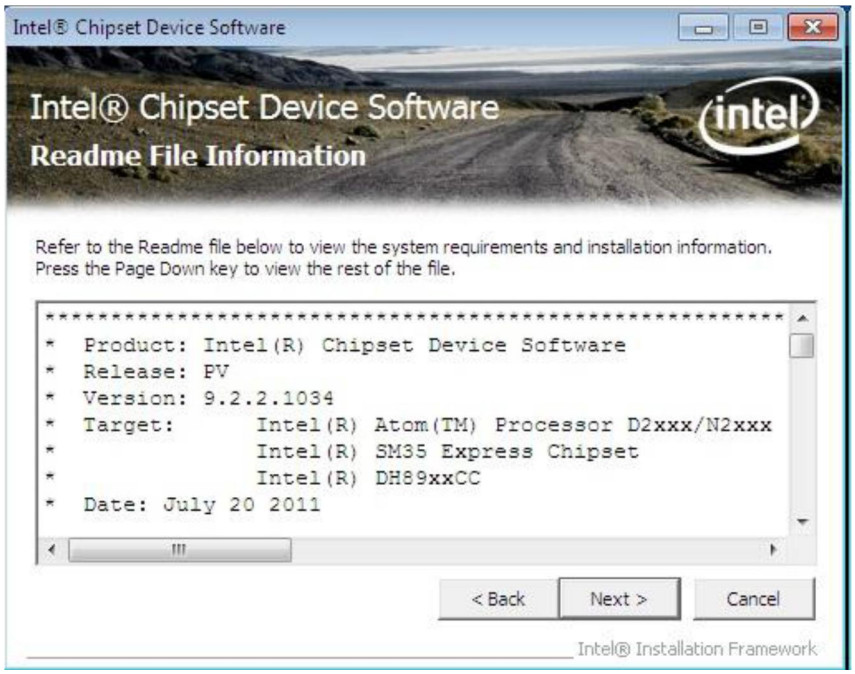
Step.2. Click on “infinst_auto.exe“ to install drive



Step.3. Click on “Yes “ to” agree License

Intel® Chipset Device Software
Intel® Chipset Device Software
License Agreement
intel
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
* If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
< Back
Yes
No
Intel® Installation Framework

Step.4. Click on “Next“ to install driver.


Intel® Chipset Device Software
Intel® Chipset Device Software
Readme File Information
intel
Refer to the Readme file below to view the system requirements and installation information.
Press the Page Down key to view the rest of the file.
****
* Product: Intel(R) Chipset Device Software
* Release: PV
* Version: 9.2.2.1034
* Target: Intel(R) Atom(TM) Processor D2xxx/N2xxx
* Intel(R) SM35 Express Chipset
* Intel(R) DH89xxCC
* Date: July 20 2011
< Back
Next >
Cancel
Intel® Installation Framework

Step.5. Click on “Next“ to install driver.

Intel® Chipset Device Software
Intel® Chipset Device Software
Setup Progress
Please wait while the following setup operations are performed:
Installing Driver: Intel(R) N10/ICH7 Family PCI Express Root Port - 27D4
Version: 9.1.1.1016
Installing Driver: Intel(R) N10/ICH7 Family PCI Express Root Port - 27D6
Version: 9.1.1.1016
Installing Driver: Intel(R) N10/ICH7 Family SMBus Controller - 27DA
Version: 9.1.1.1016
Installing Driver: Intel(R) N10/ICH7 Family PCI Express Root Port - 27D0
Version: 9.1.1.1016
Installing Driver: Intel(R) NM10 Family LPC Interface Controller - 27BC
Version: 9.1.1.1022
Click Next to continue.
Next
Intel® Installation Framework

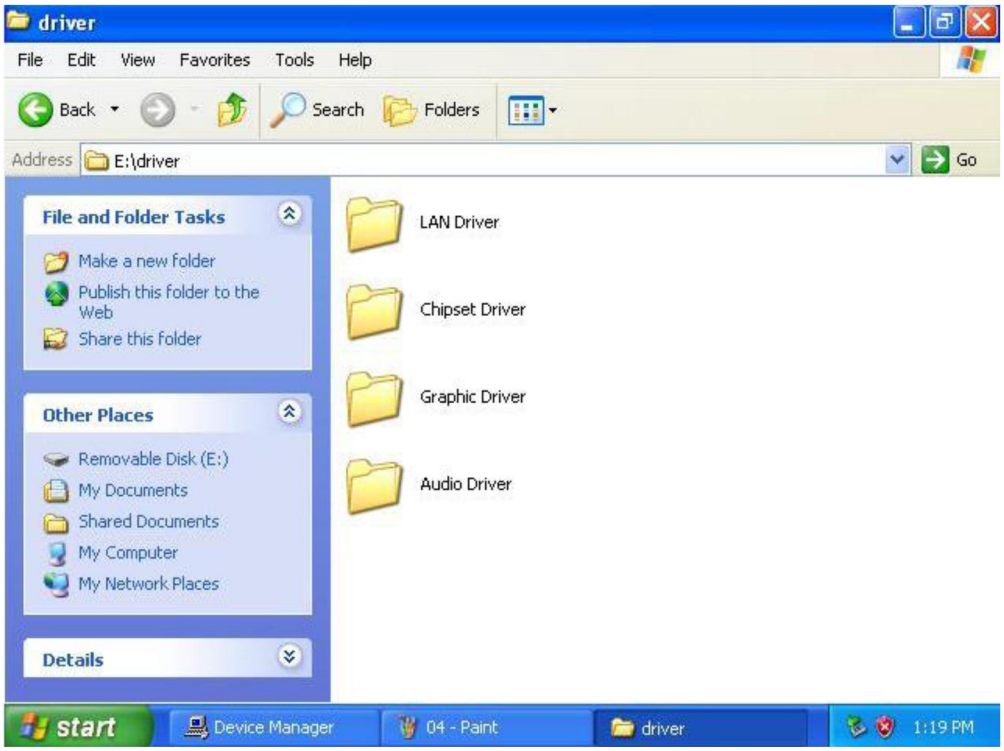
Step.6. Click on “Yes, I want to restart this computer now“ to go on.

Intel® Chipset Device Software
Intel® Chipset Device Software
Setup Is Complete
You must restart this computer for the changes to take effect. Would you like to restart the computer now?
Yes, I want to restart this computer now.
No, I will restart this computer later.
Click Finish, then remove any installation media from the drives.
Finish
Intel® Installation Framework

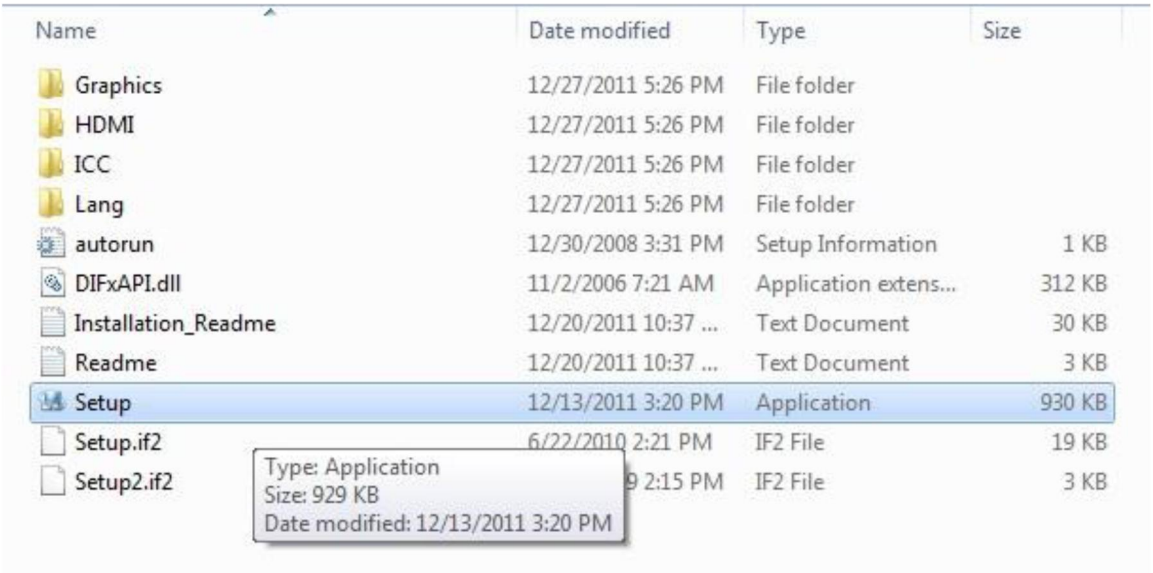
Installation of Graphic Driver

IB32 Motherboard is equipped with Intel SoC Integrated Device. The Intel Graphic Drivers should be installed first, and it will enable “Video Controller (VGA compatible). Follow the instructions below to complete the installation. You will quickly complete the installation.

Step.1. Insert the CD that comes with the Motherboard. Open the file document “Graphic Driver “.



Step.2. Click on “setup” to execute the setup.


Name
Date modified
Type
Size
Graphics 12/27/2011 5:26 PM File folder
HDMI 12/27/2011 5:26 PM File folder
ICC 12/27/2011 5:26 PM File folder
Lang 12/27/2011 5:26 PM File folder
autorun 12/30/2008 3:31 PM Setup Information 1 KB
DIFxAPI.dll 11/2/2006 7:21 AM Application extens... 312 KB
Installation_Readme 12/20/2011 10:37 ... Text Document 30 KB
Readme 12/20/2011 10:37 ... Text Document 3 KB
Setup 12/13/2011 3:20 PM Application 930 KB
Setup.if2 6/22/2010 2:21 PM IF2 File 19 KB
Setup2.if2 2:15 PM IF2 File 3 KB
Type: Application
Size: 929 KB
Date modified: 12/13/2011 3:20 PM

Step.3. Click on “Next “ to install Driver.

Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
Welcome to the Setup Program
intel
This setup program will install the following components:
- Intel® Graphics Media Accelerator Driver
- Intel® Display Audio Driver
It is strongly recommended that you exit all programs before continuing. Click Next to continue.
Automatically run WinSAT and enable the Windows Aero desktop theme (if supported).
Install Intel® Control Center
Intel® Control Center provides a centralized starting point for Intel applications making it easier to find the programs that you need.
< Back
Next >
Cancel
Intel® Installation Framework

Step.4. Click on “Yes “ to agree License.

Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
License Agreement
intel
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load software from this site or any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
• If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV) or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
• If you are an End-User, then only Exhibit A, the INTEL SOFTWARE LICENSE AGREEMENT, applies.
< Back
Yes
No
Intel® Installation Framework

Step.5. Click on “Next “ to install Driver.

Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
Readme File Information
Refer to the Readme file below to view the system requirements and installation information.
Production Version Release
Microsoft Windows* 7
Driver Revision: 8.0.0.0.1064
Display Audio Driver: 6.14.0.3081
December 20, 2011
* NOTE: This document refers to systems containing the
* following Intel processors/chipsets:
< Back
Next >
Cancel
Intel® Installation Framework

Step.6. Click on “Next “ to install Driver.

Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
Setup Progress
Please wait while the following setup operations are performed:
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\de-DE
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\da-DK
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\da-DK
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\cs-CZ
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\cs-CZ
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\ar-SA
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\ar-SA
Copying File: C:\Windows\system32\difxapi.dll
Deleting Registry Key: HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\HDMI
Deleting Registry Key: HKLM\SOFTWARE\Intel\IGDI
Click Next to continue.
Next >
Intel® Installation Framework

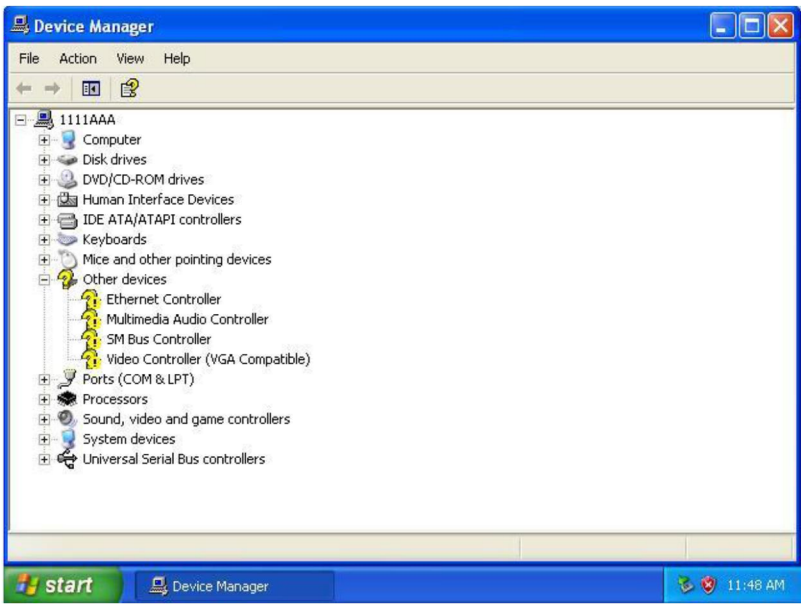
Step.7. Click on “Yes, I want to restart this computer “ now“ to go on.

Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
Setup Is Complete
intel
You must restart this computer for the changes to take effect. Would you like to restart the computer now?
Yes, I want to restart this computer now.
No, I will restart this computer later.
Click Finish, then remove any installation media from the drives.
Finish
Intel® Installation Framework

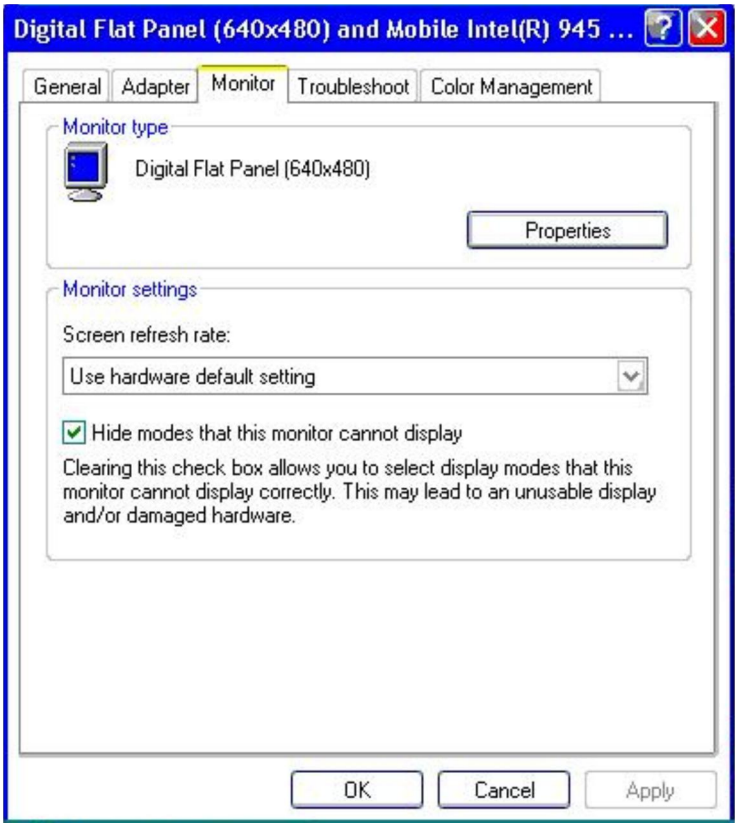
Panel Resolution Setting

Step.1. Right-click the desktop, and then click Properties.

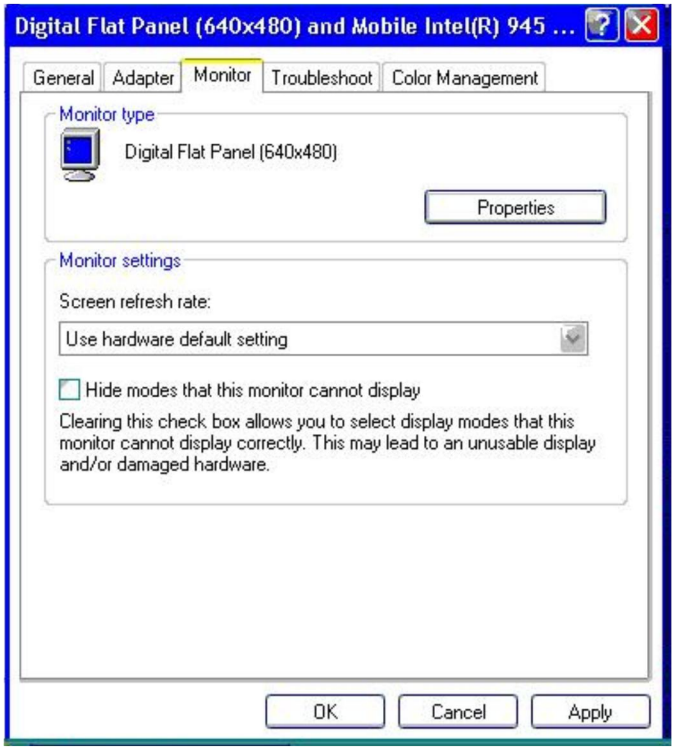
Step.2. In the Display Properties dialog box, click the Settings tab.



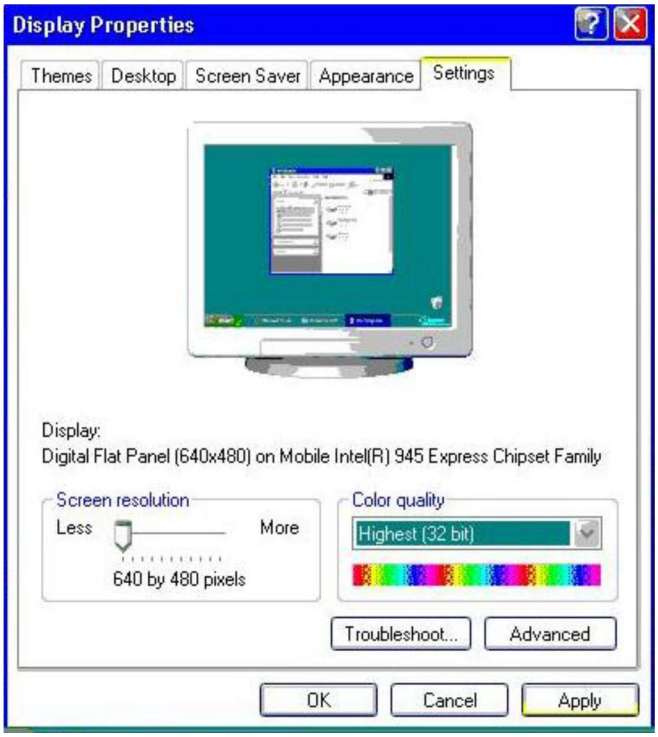
Step.3. Click on “Monitor”.



Step.4. Click on “Hide modes that this monitor cannot display” to remove this option.



Step.5. Click on “Setting”, then could choose 32bit color qualify

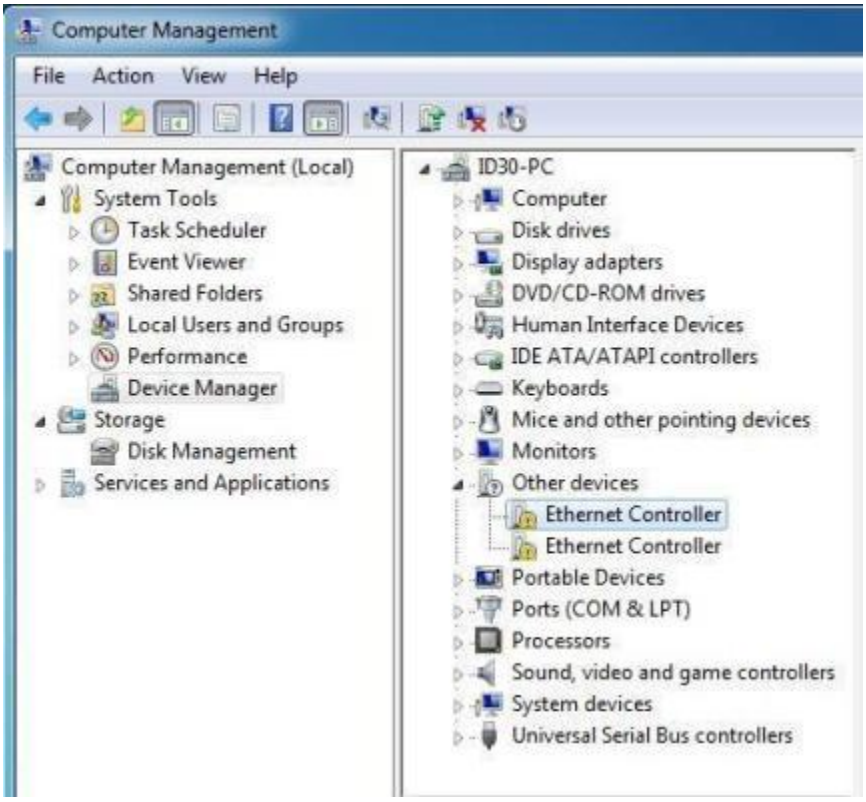


Installation of Ethernet Driver

The Users must make sure which operating system you are using in the IB32 Motherboard before installing the Ethernet drivers. Follow the steps below to complete the installation of the Intel WG82574L Gigabit Ethernet controller LAN drivers. You will quickly complete the installation.

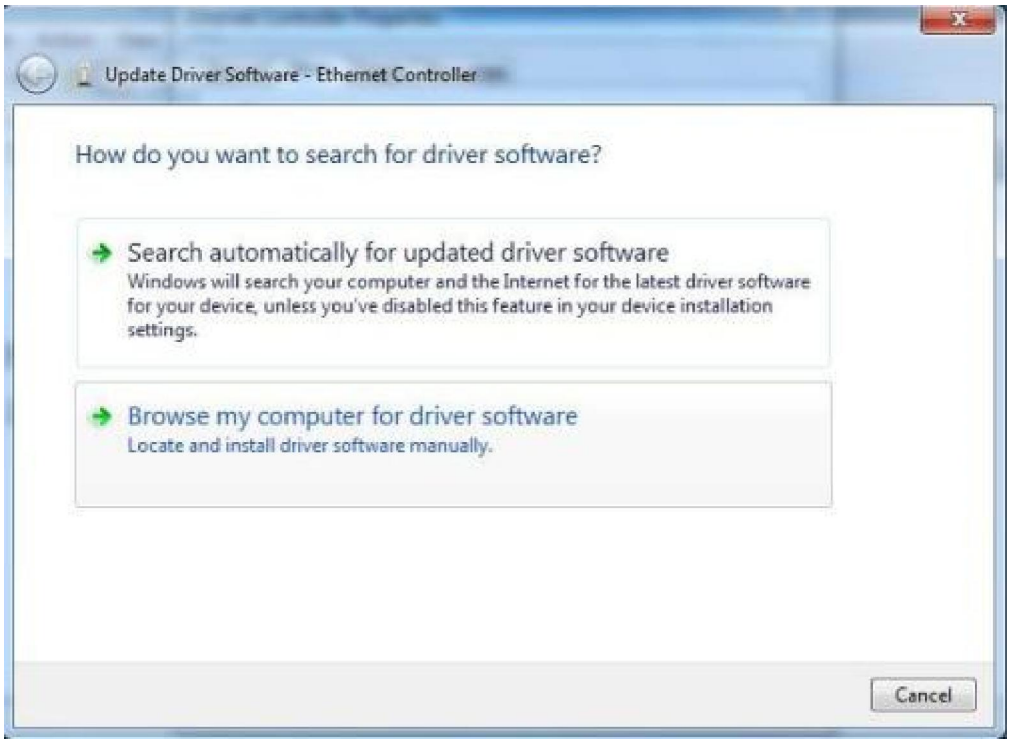
Step.1. Right-click the desktop, and then click Properties.

Step.2. In the Other device dialog box, click the Settings tab.



Step.3. Click on “Update Driver” to execute the setup.

Step.4. Click on “Browse my computer for driver software “ to install driver.


Update Driver Software - Ethernet Controller
How do you want to search for driver software?
Search automatically for updated driver software
Windows will search your computer and the Internet for the latest driver software for your device, unless you've disabled this feature in your device installation settings.
Browse my computer for driver software
Locate and install driver software manually.
Cancel

Step.5. Choose the path to install driver.

Update Driver Software - Ethernet Controller
Browse for driver software on your computer
Search for driver software in this location:
E:\Driver\ID30\Win7\LAN BCM57780_k57_32
Browse...
Include subfolders
Let me pick from a list of device drivers on my computer
This list will show installed driver software compatible with the device, and all driver software in the same category as the device.
Next
Cancel

Step.6. Click on “Close “ and go on.

Update Driver Software - Broadcom NetLink (TM) Gigabit Ethernet
Windows has successfully updated your driver software
Windows has finished installing the driver software for this device:
Broadcom NetLink (TM) Gigabit Ethernet
Close

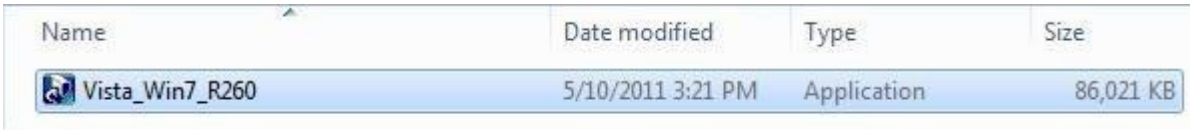
Audio Driver Introduction

The ALC886 series are high-performance 7.1+2 Channel High Definition Audio Codecs providing ten DAC channels that simultaneously support 7.1 sound play back, plus 2 channels of independent stereo sound output (multiple streaming) through the front panel stereo outputs. The series integrates two stereo ADCs that can support a stereo microphone, and feature Acoustic Echo Cancellation (AEC), Beam Forming (BF), and Noise Suppression (NS) technology.

Installation of Audio Driver

The users must make sure which operating system you are using in the IB32 Motherboard before installing the Audio drivers. Follow the steps below to complete the installation of the Realtek ALC886 Audio drivers. You will quickly complete the installation.

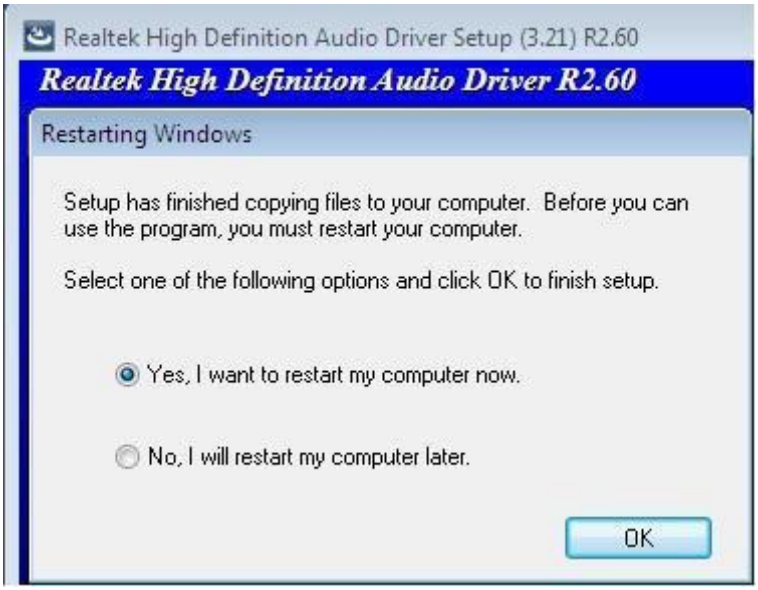
Step.1. Insert the CD that comes with the motherboard. Open the file document "alc655_driver" and click on "Vista_Win7_R260.exe" to execute the setup.



Step.2. Click on "Yes" to install driver.

Realtek High Definition Audio Driver Setup (3.21) R2.60
Realtek High Definition Audio Driver R2.60
Realtek High Definition Audio Driver - InstallShield Wizard
Welcome to the InstallShield Wizard
The InstallShield Wizard will install Realtek High Definition Audio Driver on your computer .
Do you want to continue the installation of new driver ?
Yes
No

Step.3. Click on “Yes, I want to restart my computer now” to finish installation

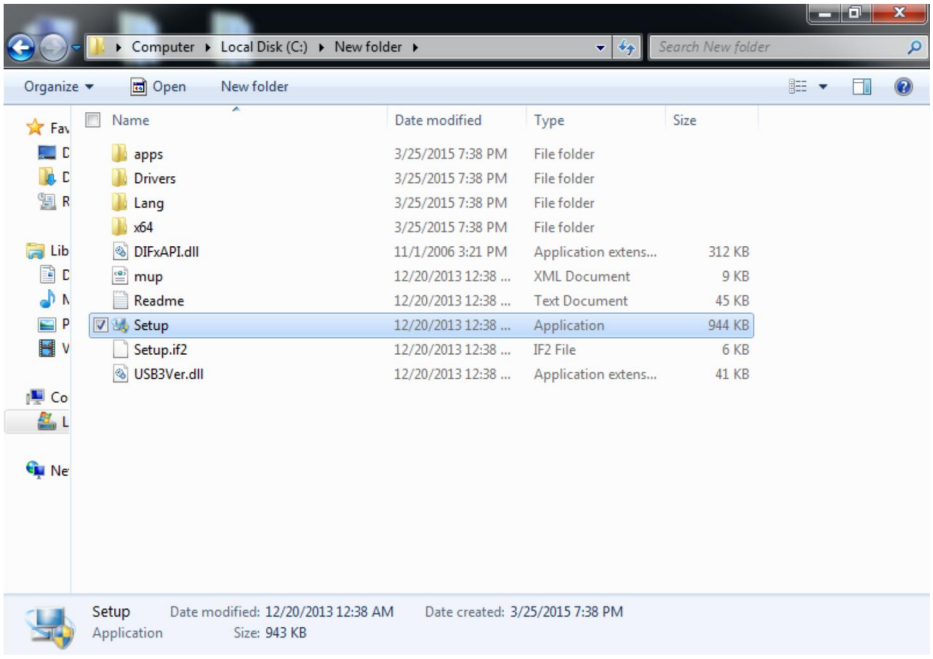

Realtek High Definition Audio Driver Setup (3.21) R2.60
Realtek High Definition Audio Driver R2.60
Restarting Windows
Setup has finished copying files to your computer. Before you can use the program, you must restart your computer.
Select one of the following options and click OK to finish setup.
Yes, I want to restart my computer now.
No, I will restart my computer later.
OK

USB 3.0 Driver Installation

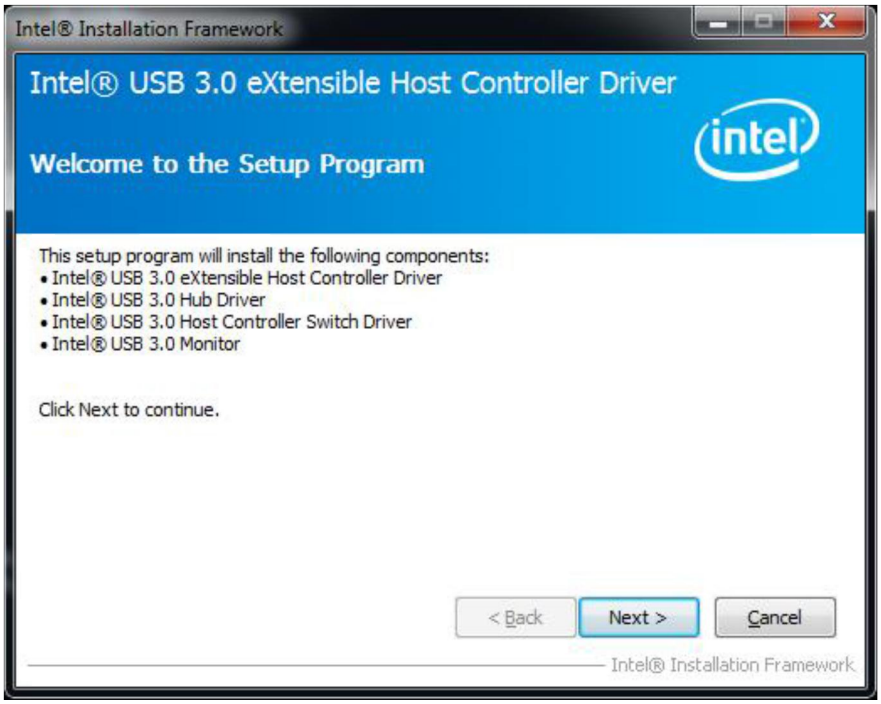
IH32 Motherboard is designed with Intel mobile Core i5 dual core CPU with the Intel® USB 3.0 extensible Host Controller. You need to install the Intel® USB 3.0 extensible Host Controller driver to enable the function.

Step.1. Locate the hard drive directory where the driver files are stored with the browser or the explore feature of Windows*.

Step.2.Double click the “Setup.exe” from this directory.


Computer ▸ Local Disk (C:) ▸ New folder ▸
Search New folder
Organize
Open
New folder
Name
Date modified
Type
Size
apps 3/25/2015 7:38 PM File folder
Drivers 3/25/2015 7:38 PM File folder
Lang 3/25/2015 7:38 PM File folder
x64 3/25/2015 7:38 PM File folder
DIFxAPI.dll 11/1/2006 3:21 PM Application extens... 312 KB
mup 12/20/2013 12:38 ... XML Document 9 KB
Readme 12/20/2013 12:38 ... Text Document 45 KB
Setup 12/20/2013 12:38 ... Application 944 KB
Setup.if2 12/20/2013 12:38 ... IF2 File 6 KB
USB3Ver.dll 12/20/2013 12:38 ... Application extens... 41 KB
Setup Date modified: 12/20/2013 12:38 AM Date created: 3/25/2015 7:38 PM
Application Size: 943 KB

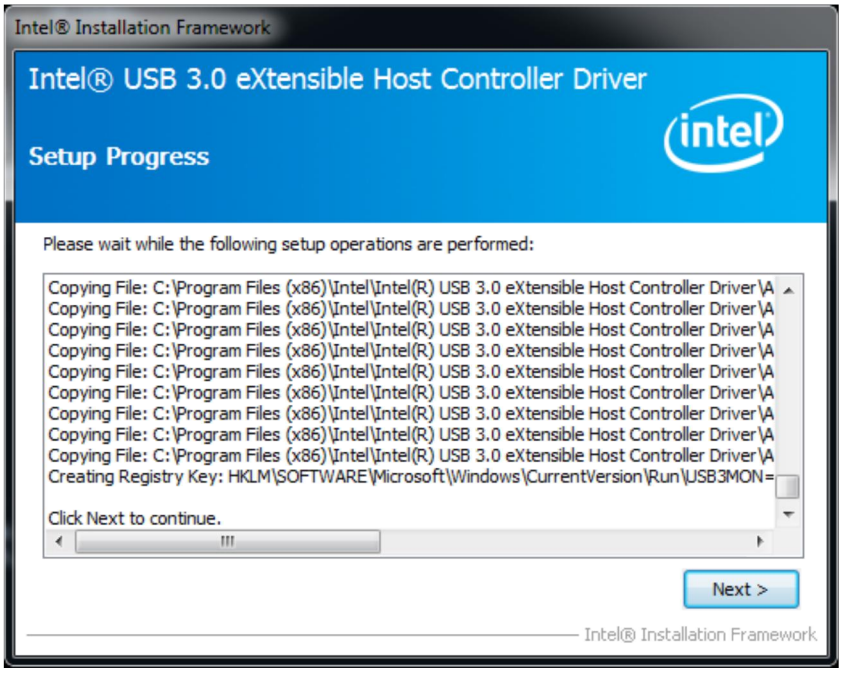
Step.3. Click “Next” to continue.


Intel® Installation Framework
Intel® USB 3.0 eXtensible Host Controller Driver
Welcome to the Setup Program
intel
This setup program will install the following components:
• Intel® USB 3.0 eXtensible Host Controller Driver
• Intel® USB 3.0 Hub Driver
• Intel® USB 3.0 Host Controller Switch Driver
• Intel® USB 3.0 Monitor
Click Next to continue.
< Back
Next >
Cancel
Intel® Installation Framework

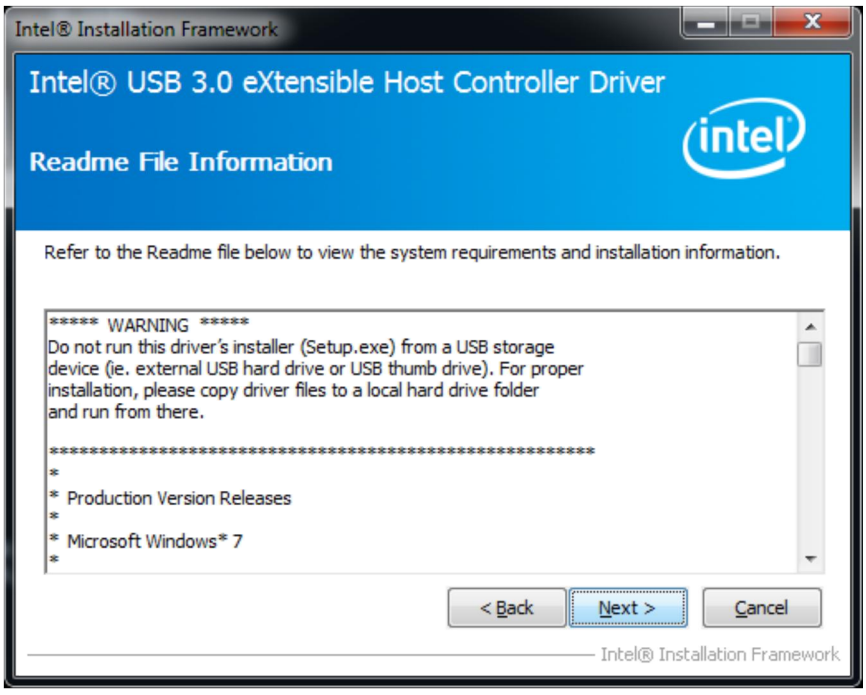
Step.4. Read License Agreement and click “Yes” to proceed.

Intel® Installation Framework
Intel® USB 3.0 eXtensible Host Controller Driver
License Agreement
intel
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
* If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
* If you are an End-User, then only Exhibit A, the INTEL SOFTWARE LICENSE AGREEMENT,
< Back
Yes
No
Intel® Installation Framework

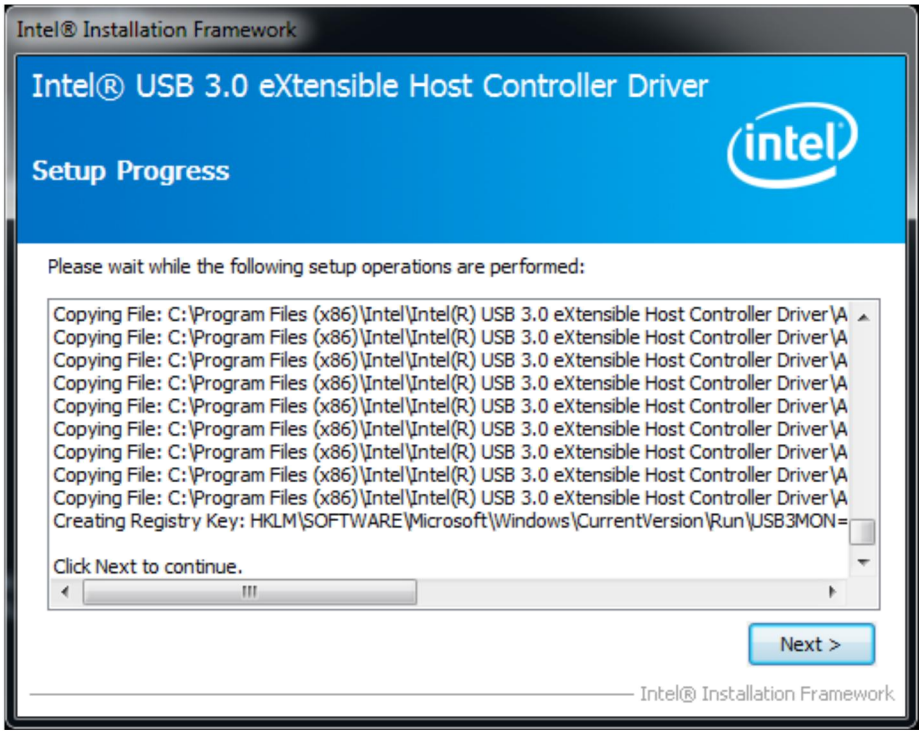
Step.5. Review Readme File Information and click “Next” to proceed.



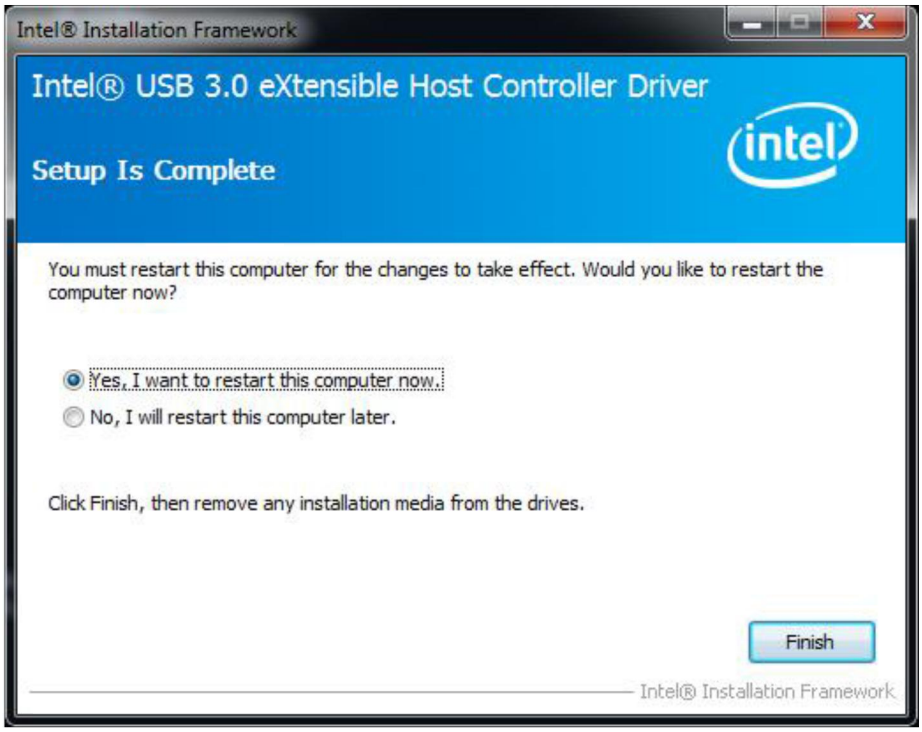
Step.6.When the “Setup Progress” is complete click “Next” to proceed.



Step.7. When the “Setup Progress” is complete click “Next” to proceed.



Step.8. Lastly, the “Setup Complete” screen appears so click “Finish” to restart your computer.



Mounting Installation

PCAP Series Mounting Guide

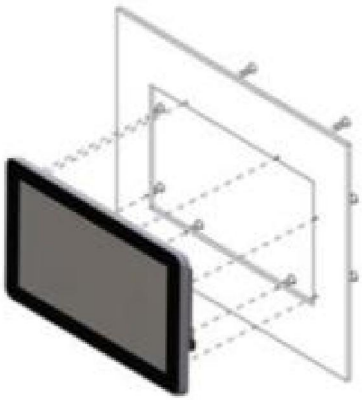
P-CAP Series is suitable for most of the industrial/commercial application, by any kind of mounting approach. The main mounting Approaches, such as chassis, is very easy for user to install as the pictures guided.

VESA Mount

- Dimension: 75 x 75mm
- Screw Hole Diameter: VESA M6 x 5mm
- Compatible with swimming arms mounting kits.

Flush Mount / Panel Mount:

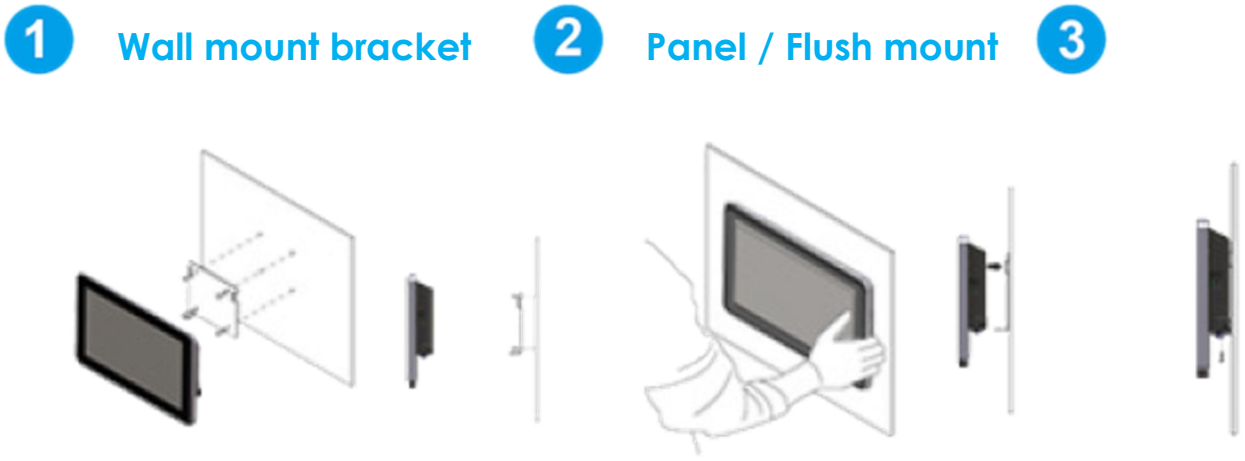
- Cut Out: 157.6 x 249 mm
- Screw Hole Diameter: M3 x 4 mm



1. Adhere the attached gasket to panel PC back cover.
   [Note] Please make sure that the eight holes on gasket can fit this mounting holes on panel PC.
2. Put panel PC on the pre-drilled fixture (wall or panel…) from the front, with the sides of the front bezel shown on the outside.
3. Fix the PPC to fixture with M3 screws.

Winmate VESA Bracket Mount (Optional):

1. Screw Winmate VESA Bracket to the fixture (ex. Wall) with M4 flat head screws.
2. Place the 10.1” panel PC on VESA bracket. Please notice that both hooks on bracket should lock the notches on panel PC back cover.
3. Slightly pull down panel pc till reaching the blocker on bracket. Fix panel PC to the blocker with the M3 round head screw attached.



SPECIFICATIONS

Hardware Specifications

W10IB3S-PCH2AC

System :	
Processor	Intel® Celeron® Bay Trail-M N2930 1.83GHz
System Chipset	Intel® ATOM SoC Integrated
System Memory	4GB DDR3L 1066/1333 SO-DIMM
Storage	64GB mSATA SSD
LAN	Dual Intel® WG82574L GbE LAN
Display Spec	
Size/Type	10.1" TFT (Wide screen)
Resolutions	1280x800
Brightness	300cd/m (typ.)
Contrast Ratio	800 : 1 (typ.)
Viewing Angle	-89~89(H);-89~89(V)
Max Colors	262K(6bit)
Touch	Projective-Capacitive Touch (up to 4 points)
Input / Output :	
Serial Ports	1 x RS232/422/485
USB Ports	1 x USB 3.0 1 x USB 2.0
Ethernet	2 x RJ 45-10/100/1000 Mbps
HDMI	1 x HDMI
Mechanical Specification :	
Cooling System	Fanless design
Mounting	VESA Mount(75x75mm)
Dimension	263.28 x 171 x 35.7 (mm) (W x H x D)
Environment Considerations :	
Operating Temperature	0 deg.C to 50deg.C
Operating	30% to 90% (non condensing)
Power Specifications :	
Power Input	12V DC IN Terminal Block (Phoenix Type)

W10IB3S-PCH1AC

System :	
Processor	Intel ® Celeron ® Bay Trail-M N2930 1.83GHz
System Chipset	Intel® ATOM SoC Integrated
System Memory	4GB DDR3L 1066/1333 SODIMM
Storage	64GB mSATA SSD
LAN	Dual Intel® WG82574L GbE LAN
Display Spec	
Size/Type	10.1" TFT (Wide screen)
Resolutions	1024x600
Brightness	200cd/m (typ.)
Contrast Ratio	500 : 1 (typ.)
Viewing Angle	-70~70(H);-50~60(V)
Max Colors	262K(6bit)
Touch	Projective-Capacitive Touch (up to 4 points)
Input / Output :	
Serial Ports	1 x RS232/422/485
USB Ports	1 x USB 3.0 1 x USB 2.0
Ethernet	2 x RJ 45-10/100/1000 Mbps
HDMI	1 x HDMI
Mechanical Specification :	
Cooling System	Fanless design
Mounting	VESA Mount(75x75mm)
Dimension	263.28 x 171 x 35.7 (mm) (W x H x D)
Environment Considerations :	
Operating Temperature	0 deg.C to 50deg.C
Operating	30% to 90% (non condensing)
Power Specifications :	
Power Input	12V DC IN Terminal Block (Phoenix Type)

Restoring Operating System

Using Recovery Wizard to Restore Panel PC

Our system has a dedicate recovery partition stored on the hard drive of the PC to enable quick one-key recovery process. This partition occupies about 11GB of the storage space, and comes built-in to each Panel PC.

WARNING!

Before starting the recovery process, be sure to backup all user's data, as all data will be lost after the recovery process.

Follow the procedure below to enable quick one-key recovery procedure:

Plug-in the AC adapter to Panel PC. Make sure the Panel PC stays plugged in to power source during the recovery process.

Turn on the Panel PC, and when the boot screen shows up, press the F6 to initiate the Recovery Wizard.

The following screen shows the Recovery Wizard. Click on "Recovery" button to continue.

Recovery Wizard
Click " Recovery " to restore your system.
The process will clear all of your data.
If you do not want to restore your system please press " Quit " to reboot.
Recovery
Quit

4. A warning message about data loss will show up. Make sure data is backed up before recovery, and click on "Yes" to continue.

Recovery your systems
Are you sure you want to recovery your system?
The action will delete all of your data on your disk.
Yes
No

Wait till the recovery process to complete. During the recovery process, a command prompt will show up to indicate the percent of recovery process. After recovery process is completed, the computer will restart automatically